Bayesian Econometrics in Macro-Stress Testing

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Given the importance both theoretical and practical, we study the application of modern methodologies in the quantitative evaluation of the ability to adapt to adverse financial scenarios, scenarios stressed in terms of macroeconomic variables that correspond to periods of economic turbulence. In this paper, we present candidate models to predict the evolution, behavior and adaptation of credit risk parameters to hostile scenarios: Autoregressive Distributed Lag (ADL) Model, State-Space Model, Time-Varying Vector Autoregressive (TV-VAR) Model and its applications to Macro-Stress Testing. Given the limited nature of the aggregate data, we present the Bayesian verisions of the methodologies in order to incorporate the uncertainty generated by the sample size.

References

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